

NOTES ON THE INDIGENOUS PLANTS IN THE
COBAR DISTRICT. No. ii.

BY ARCHDEACON F. E. HAVILAND.

The following List is supplementary to that reported in the Proceedings of this Society for 1911 (p.507); and brings the number of species, exclusive of varieties, to more than 500, including a number of Cryptogams.

There are, in this district, certain genera which, from their isolated occurrence and weakened constitutions, appear to be vanishing. Among such may be noted *Thysanotus*, of which only two species, *T. Baueri* and *T. Patersoni* remain; and *Ranunculus*, of which only one species, *R. parviflorus*, remains. Such as these appear only when conditions are specially favourable; indeed, from their texture, one would think that they were quite unsuitable for these droughty parts. Moreover, from a merely casual survey of the vegetation of this district, one becomes convinced that, for ages past, there has been a diminution of that class of vegetation which, though apparently luxurious in the former times with an equable climate, has had, since the present physical features brought about normal conditions of drought, a struggle to live. As may be expected, those species are thriving best which, either by a thickened cuticle, or double and even triple palisade-cells, or by excretions of wax, resins, or gums, have the means of reserving plant-foods.

A matter bidding to become of more than passing interest, in the near future, is the recourse to mixing certain bushes as fodder for starving stock. It is a matter that is self-adjusted by travelling stock themselves, as they then have an opportunity of picking at various bushes, and are not restricted to one species; and anyone accustomed to watch the habits of travelling stock, well

knows how sheep will nibble at a bush, and suddenly leaving it, attack a different species, and so satisfying their tastes by variety; but when sheep have to be hand-fed, on a run, it is a different matter; and here it is that some scientific adjustment is needed. Mr. F. B. Guthrie has done something towards this end, in his computations of the nutrient values of some of our fodder-shrubs (see *Agricultural Gazette*, Vol. xviii., p. 351). There are some of our bushes which would act as a valuable pickle, whereby to aid the digestion of some of the more plentiful edible shrubs not so readily eaten by stock. The mixing, for instance, of the "Apple Rosewood"—*Heterodendron oleæfolium* with the Mulga, *Acacia aneura*, which is more plentiful, but not so nourishing, is reputed to be an improvement upon the latter eaten alone. In Mr. Guthrie's Table, the ratio of the albuminoids to the carbohydrates and fats, in *H. oleæfolium*, is given as 1 to $3\frac{1}{2}$, and the nutrient value as 69; while the ratio of the same constituents in *A. aneura* is as 1 to $2\frac{1}{2}$, and the nutrient value as $30\frac{3}{4}$. The comparative poorness of the Mulga is, therefore, compensated for in the richness of the Apple Rosewood. It must, however, be remembered that what makes the Mulgas the more valuable bushes, is not in their nourishing qualities, but their more widespread distribution, and their endurance in times of extreme drought. If such an adaptation of our fodder-shrubs were to be practised, there would be much economising of the more valuable fodder-shrubs, and some use might then be made of shrubs which so far are problematical as to their profitable uses. Such shrubs as the "Warrior Bush" (*Apophyllum anomalum*), "Budtha Bush" (*Eremophila Mitchellii*), and the "Turpentine Bush" (*E. Sturtii*), according to the Table quoted, would even be of better use than that of making brooms of one, and sand-barriers of the others. On some species noted in my first List, I have added further notes herein, culled from additional observations.

Again I have to acknowledge, with thanks, the co-operation of those friends who have assisted me in the collection of specimens, thus contributing to a more complete census of western plants as represented in the Cobar district.

Synopsis of Plants noted.

(The following numbers represent totals of genera and species contained in this and the previous List.)

DICOTYLEDONS.

Orders.	Genera.	Species.	Orders.	Genera.	Species.		
RANUNCULACEÆ	...	1	1	RUBIACEÆ	...	4	5
PAPAVERACEÆ	...	3	3	COMPOSITÆ	...	40	67
CRUCIFERÆ	...	8	17	GOODENIACEÆ	...	4	10
VIOLACEÆ	...	1	1	CAMPANULACEÆ	...	2	2
CAPPARIDÆ	...	2	2	PRIMULACEÆ	...	1	1
RESEDACEÆ	...	1	1	JASMINEÆ	...	1	2
PITTOPOREÆ	...	1	1	APOCYNEÆ	...	2	3
CARYOPHYLLÆ	...	6	6	ASCLEPIADEÆ	...	3	3
PORTULACEÆ	...	2	2	GENTIANEÆ	...	2	2
MALVACEÆ	...	7	12	BORAGINEÆ	...	5	5
STERCULIACEÆ	...	1	1	CONVOLVULACEÆ	...	4	4
LINEÆ	...	1	1	SOLANEÆ	...	3	8
ZYGOPHYLLÆ	...	2	5	SCROPHULARINEÆ	...	4	6
GERANIACEÆ	...	2	2	BIGNONIACEÆ	...	1	1
RUTACEÆ	...	4	6	ACANTHACEÆ	...	1	1
MELIACEÆ	...	1	1	MYOPORINEÆ	...	2	11
CELASTRINEÆ	...	1	1	VERBENACEÆ	...	2	2
STACKHOUSIEÆ	...	1	3	LABIATÆ	...	8	11
RHAMNEÆ	...	2	2	PLANTAGINEÆ	...	1	1
SAPINDACEÆ	...	4	12	SALSOLACEÆ	...	8	28
LEGUMINOSÆ	...	14	53	AMARANTACEÆ	...	3	8
CRASSULACEÆ	...	1	1	POLYGONACEÆ	...	3	7
HALORAGEÆ	...	2	2	NYCTAGINEÆ	...	1	1
MYRTACEÆ	...	5	17	PROTEACEÆ	...	2	5
ONAGRARIÆ	...	1	1	THYMELEÆ	...	1	2
CUCURBITACEÆ	...	1	2	EUPHORBIACEÆ	...	5	5
FICOIDEÆ	...	1	1	URTICÆ	...	2	3
UMBELLIFERÆ	...	4	5	CASUARINEÆ	...	1	3
LORANTHACEÆ	...	1	7	SANTALACEÆ	...	3	4
CONIFERÆ	1	5			



MONOCOTYLEDONS.

Orders.	Genera.	Species.	Orders.	Genera.	Species.
ORCHIDEÆ...	...	1 1	JUNCACEÆ ...	...	3 8
AMARYLLIDEÆ	...	1 1	NAIADEÆ ...	...	1 1
LILIACEÆ	4 5	CYPERACEÆ	...	4 6
			GRAMINEÆ ...	...	31 57

ACOTYLEDONS.

MARSILIACEÆ	...	1 3	MUSCI	...	3 4
FILICES	...	4 4	LICHENS	...	6 6
			FUNGI	...	15 21

	Orders.	Genera.	Species.
Dicotyledons ...	...	59	201 ... 387
Monocotyledons	...	7	45 ... 79
Acotyledons ...	...	5	29 ... 38
	—	—	—
	71	275	504
	—	—	—

INDIGENOUS PLANTS IN THE COBAR DISTRICT.

Class i. DICOTYLEDONS.

Subclass POLYPETALÆ.

Series i. Thalamifloræ.

PAPAVERACEÆ.

*FUMARIA OFFICINALIS Linn. Wuttagoona. September.

*PAPAVER HYBRIDUM Linn. Wuttagoona. September. Orange-coloured petals, the lower one having a dark blotch.

CRUCIFERÆ.

STENOPETALUM NUTANS F.v.M. Wuttagoona. September.

CARDAMINE LACINIATA F.v.M. Wuttagoona. September.

LEPIDIUM HYSSOPIFOLIUM Desv. Wuttagoona. September.

SISYMBRIUM ORIENTALE. Cobar.

VIOLACEÆ.

HYBANTHUS FILIFORMIS F.v.M. Wuttagoona. September.

CARYOPHYLLÆ.

- GYPSOPHILA TUBULOSA Boiss. "Soapwort." Wuttagoona. September.
 STELLARIA PALUSTRIS Retz. Wuttagoona.
 POLYCARPON TETRAPHYLLUM Linn.f. Cobar. September, March.

MALVACEÆ.

- SIDA PETROPHILA F.v.M. Wuttagoona. September.
 ABUTILON CRYPTOPETALUM F.v.M. Cobar. September.
 HIBISCUS STURTHII var. MUELLERI. Cobar. October, March
 var. GRANDIFLORA. Cobar. October, March.

Series ii. **Discifloræ.**

RUTACEÆ.

- ERIOSTEMON LINEARIS Cunn. On rocky slopes at Wuttagoona. September.
 CORREA SPECIOSA Andr. At Wirlong (Mr. Cambage's List).

STACKHOUSIÆ.

- STACKHOUSIA MURICATA Lindl. On Box-flats at Amphitheatre and towards Louth. Also a stellate, pubescent form at Amphitheatre.
 S. FLAVA Hk. This sulphur-coloured specimen comes nearest to this species.

RHAMNACEÆ.

- CRYPTANDRA AMARA Sm. On spinifex country at Shuttleton. September.

SAPINDACEÆ.

- HETERODENDRON OLEÆFOLIUM Desf. (additional note). The leaves of this species are subject to small pillar-shaped galls formed by leaf-mites of the family Eriophyridæ, "elongated, minute, transparent creatures of which the Pear-leaf Mite is an example" (Mr. Froggatt). The leaves of the two species of this genus, when cut up with Mulga-leaves, make very good fodder.

DODONÆA BORONIÆFOLIA Don. The wings of the fruits of this species are more wrinkled than those of others. It is an attractive shrub in appearance. At Restdown. Fruiting in September.

D. TRIANGULARIS Lindl.

D. sp. (?). Having foliage answering to *D. megazyga* F.v.M. At Shuttleton.

D. ATTENUATA Cunn. Cobar.

CARDIOSPERMUM HALICACABUM Lerida. "Balloon-Climber." November-April.

Series iii. **Calycifloræ.**

LEGUMINOSÆ.

Suborder *Papilionaceæ.*

EUTAXIA EMPETRIFOLIA Schl. On the spinifex-country, 6 miles east of Shuttleton. September.

LOTUS AUSTRALIS var. *PARVIFLORUS*. Kergunyah. November.

PSORALEA CINEREA Lindl. Wuttagoona. September.

P. TENAX Lindl.

SWAINSONA GALEGIFOLIA R.Br. "Darling Pea." Wuttagoona. September.

S. LUTEOLA F.v.M. At the rifle-butts, Cobar. June.

S. PHACOIDES Benth.

Suborder *Cesalpinieæ.*

CASSIA STURTII R.Br. A narrow-leaved variety is growing at Shuttleton, and shows a more profuse flowering than that of the typical species.

Suborder *Mimoseæ.*

ACACIA RIGENS Cunn. Wuttagoona.

A. CALAMIFOLIA Sweet. Shuttleton.

A. SALICINA (additional note). The natural habitat of this species is the river-country, where it is easily distinguished by its drooping habit; but in the Cobar district, it grows on the ridges, and its branches are more spreading, so that, when attaining any size, the foliage becomes so heavy as to force the slender stem to bend over to the ground, causing an ascending habit in the

- extremities of the branches. It is subject to a tender gall much like a gooseberry in appearance, but very bitter.
- A. IMPLEXA Benth. At Shuttleton, and on the granite-hills at Nymagee.
- A. TRIPTERA Benth. "Wait-a-while." Nymagee and Sandy Creek. September.
- A. LINEATA Cunn. A very viscid species about Shuttleton. September.
- A. AMBLYGONA Cunn. On hilly country at Wirlong. September.
- A. IXIOPHYLLA Benth. South of Wirlong.
- A. DECURRENS var. MUELLERIANA Maiden & Betche. At Gilgunnia. September.
- A. DEALBATA Link. A green variety near Gilgunnia.
- A. OBLIQUA Cunn. On the spinifex-country near Shuttleton. September.
- A. UNDULIFOLIA Fraser, var. PUBESCENS. Shuttleton. September.
- A. CIBARIA F.v.M., (additional note). On account of its general appearance, it is locally known as "Umbrella-Mulga." The phyllodia are 4-6 inches long, and 1-1½ lines broad, and very thick. Growing in gregarious patches over extensive areas, in the western portions of the district.
- A. HOMALOPHYLLA (additional note). There are several varieties about the district. A long-leaved form growing at Lerida; a broad, oblong form 3 miles west of Cobar; and a narrow, slightly falcate form south of Cobar. A peculiarity connected with the "Yarrens" is, that the foliage assumes a light yellow or seared colour during the winter and flowering-season, but regains its natural green colour during the fruiting-season. There is a "Ring Yarren," but beyond seeing a specimen of the wood, I have not yet come across the bush, nor can I get any information as to its varietal characteristics.

- A. ANEURA (additional note). A variety having phyllodia 4-6 inches long, and $\frac{3}{4}$ -1 line broad, and almost terete, but with the fruit typical of the species, is growing near Lerida. August.

The Mulga-Balls, mentioned in my first List, are formed in the podge of sheep, and are considered to be the result of the sheep eating the young shoots and branchlets of the Mulga, especially of the narrow-leaved forms. A report from the Bacteriological Dept. says :—“ This consists, for the most part, of long cells usually tapering at each end, but sometimes truncated at one end, sometimes at both ends. Through the centre of the cells, there runs frequently a narrow canal. The walls of the cells are very thick, and sometimes apparently pitted. These cells have the appearance of bast-fibres, and as several may frequently be found adhering, this view is strengthened. A small number of spiral vessels and wood tracheides are also present. Interspersed among all these, is a brown powdery deposit without cell-structure. It is suggested that the balls are due to the bark of a tree eaten by the sheep. The brown colouring matter of the balls is due to the undigested outer particles of the bark ” (Mr. G. P. Darnell-Smith, B.Sc.).

- A. HARPOPHYLLA F.v.M. “Brigalow.” Tindare and Wuttagoona.

HALORAGEÆ.

- HALORAGIS ASPERA Lindl. (*H. ceratophylla* Endl.). On the spinifex-country, 6 miles east of Shuttleton. September.

MYRTACEÆ.

- LEPTOSPERMUM ELLIPTICUM Endl. At Restdown. September.
 THRYPTOMENE CILIATA F.v.M. Chiefly on ridges of Devonian rocks, at Boppy Mount, but gradually spreading to other soils. September.
 MELALEUCA UNCINATA R.Br. On the granite hills at Nymagee, at Mount Boorandara, and Wuttagoona.

KUNZEA PEDUNCULARIS F.v.M. Boorandara.

EUCALYPTUS SIDEROXYLON Cunn. "Red-flowered Ironbark," at Shuttleton.

E. DEALBATA F.v.M. "Cabbage-Gum," "White Gum." Near Shuttleton. September.

E. TERMINALIS. "Bloodwood." Mount Dijou.

E. MELANOPHLOIA(?) probably, but I am waiting for confirmation as to the flowers. This tree, with a deeply furrowed black bark, is growing on sedimentary soils, over a stratum of limestone, at the Meadows, and quite isolated from any other Ironbark; it is the only tree of the Series known in the far west. It is impossible to conjecture as to how it became domiciled there.

E. spp.(?). Three species collected by Mr. Andrews, and of which I am awaiting flowers and fruits. One with ovate, constricted, truncate fruits; a second with foliage resembling *E. viridis*, but with globular depressed buds 3 lines in diameter; and a third somewhat resembling *E. Behriana*.

FICOIDEÆ.

MOLLUGO GLINUS Harv. Wuttagoona. September.

UMBELLIFERÆ.

TRACHYMENE INCISA Rudge, (*Didiscus albiflora* DC.). Near the 23-mile Tank, Wilcannia Road. October.

DIDISCUS ERIOCARPUS F.v.M. In shady spots at Wuttagoona. September.

D. PILOSA Benth. Wuttagoona. September.

Subclass ii. MONOPETALÆ.

RUBIACEÆ.

ASPERULA CONFERTA Hk. On Box-flats and other damp places at Amphitheatre. October.

COMPOSITÆ.

VITTADINIA TRILOBA DC. Scarce about Cobar. September.

MINURIA CANDOLLEI F.v.M.

- CALOTIS SCABIOSIFOLIA Sond. & F.v.M. Wuttagoona. September.
- C. PLUMULIFERA F.v.M. Wuttagoona. This answers in all respects to the type, but has no plumose hairs on the achenes of my specimen.
- C. MICROCEPHALA Benth. Cobar. June.
- EPALTES AUSTRALIS Less. O'Gorman's Tank, and at other places about Cobar.
- MYRIOCEPHALUS RHIZOCEPHALUS Benth. Meryula. September.
- LEPTORRHYNCUS WAITZIA Sond. Towards Louth and Wuttagoona. September.
- CHTHONOCEPHALUS PSEUDOEVAX Steetz. Wuttagoona. September. A peculiar sessile Composite growing in crevices and hollows of rocks.
- HELICHRYSUM BRACTEATUM Willd. A variety differing from the type in having narrow linear leaves.
- H. DIOTOPHYLLUM F.v.M. At 4 miles south of Shuttleton. September.
- HELIPTERUM FLORIBUNDUM (additional note). This is considered a good sheep-fodder herb while dry weather lasts, but heavy rain turns it black, and sheep will not then eat it. Spreading very quickly and thickly, it kills out all other herbs. I have seen areas of quite two miles square quite covered with it, and when in flower, the ground has the appearance of being snow-covered.
- H. LÆVE Benth. A small herb of only a few inches. Wuttagoona. September.
- HYPOCHÆRIS GLABRA Linn. "Hogweed." The leaf-veins of my specimen are scabrous. Hospital Hill, Cobar. September.
- *SONCHUS OLERACEUS. This was wrongly recorded as *S. arvensis* in my first List. My specimen was an abnormal growth having a glandular-pubescent calyx, and I mistook it for a modified form of the latter.
- *CARTHAMUS LANATUS Linn. "Saffron Thistle," but known to some as a "Star-Thistle." A troublesome weed, getting a great hold on several runs, and spreading both west and south. When dry, young sheep will eat it; but

when advanced, nothing can get near it on account of its long spines. Being chiefly confined to damp spots, it is hoped that it will kill itself out.

CARDUUS PYCNOCEPHALUS Linn. Wuttagoona.

TARAXACUM DENS-LEONIS Desf. "Dandelion." In places.

GOODENIACEÆ.

VELLEYA PARADOXA R.Br. Scattered over the western portions of the district. September.

GOODENIA GLABRA R.Br. Cobar. March and October.

G. HAVILANDI Maiden & Betche (*antea*, p.250). On left side of Louth Road, 11 miles from Cobar; and at Alley Trig. Station. September.

GENTIANEÆ.

LEMNANTHEMUM sp.(?). At Wuttagoona. October.

BORAGINEÆ.

ECHINOSPERMUM CONCAVUM F.v.M. At rear of Hospital Hill, Cobar. August.

CONVOLVULACEÆ.

PORANA SERICEA F.v.M. A first record from New South Wales. Growing near Amphitheatre Station, and thus connecting its habitat with West Australia and North Queensland.

DICHONDRA REPENS Forst. Near the old Reservoir at Cobar.

SCROPHULARINEÆ.

MIMULUS PROSTRATUS Benth. At Fort Bourke Reservoir. September.

M. GRACILIS R.Br. Wuttagoona. September.

*LINARIA CYMBALARIA Mill. Cobar. June.

MYOPORINEÆ.

MYOPORUM ACUMINATUM R.Br. A narrow-leaved variety growing on the quartzite and felspar porphyry-ridges towards North Peak, Shuttleton. Fruiting in September.

EREMOPHILA LATIFOLIA (additional note). This shrub has become subject to a scale-insect known as *Eriococcus buxi*; though often covering the leaves and branches, it does not apparently injure the shrub.

LABIATÆ.

PROSTANTHERA NIVEA Cunn. On ridges of Pre-Silurian age, near Shuttleton. The flowers are mainly of a pure white, but occasionally relieved with a tinge of lilac. September.

P. ASPALATHOIDES Cunn. (*P. coccinea* F.v.M.). On hills of Pre-Silurian age, near Shuttleton. A profusely flowering bush with scarlet flowers. September.

WESTRINGIA RIGIDA R.Br. On spinifex-country south of Shuttleton. September.

TEUCRIUM CORYMBOSUM R.Br. On dense quartzite-ridges, north of Nymagee. September.

*STACHYS ARVENSIS Linn. Wuttagoona. September.

Subclass iii. MONOCHLAMYDEÆ.

SALSOLACEÆ.

ATRIPLEX VESICARIA Hewart. A dioecious form, at Springfield. October.

A. MUELLERI Benth. North Cobar.

A. PROSTRATA R.Br.

KOCHIA HUMILLIMA F.v.M. Cobar.

K. VILLOSA var. ERIANTHA Lindl.

BASSIA (SCLEROLÆNA) DIACANTHA Benth. North Cobar.

B. ENCHYLÆNOIDES F.v.M.

AMARANTACEÆ.

PTILOTUS ALOPECUROIDEUS Lindl. (additional note). There is a form of this species, which sometimes appears at Kergunyah, which is quite devoid of floral bracts and stem-leaves, and has a perianth of a reddish colour, though, upon boiling, the reddish colour gives place to the typical green-yellow of the species.

P. HEMISTEIRUS F.v.M.

POLYGONACEÆ.

RUMEX HALOPHILUS F.v.M. Cobar.

R. CRISPUS Linn. Occidental Tank, Wrightville. September.

POLYGONUM PLEBIUM R.Br.

PROTEACEÆ.

HAKEA LEUCOPTERA R.Br. On red sandy soil, in several places.
September.

EUPHORBIACEÆ.

EUPHORBIA DRUMMONDII Boiss., (additional note). "Poison-Weed." I had, in my first List, written this as a poisonous plant; but though drovers are very emphatic about it as such, in laboratories it is not considered as containing any virus. Probably, therefore, it is only mechanically dangerous to stock, especially when animals, having empty stomachs, after a long and hot day's journey, are turned on to it.

E. EREMOPHILA Cunn. Wuttagoona.

POORANTHERA MICROPHYLLA Brongn. Nymagee. September.

PHYLLANTHUS FUERNROHRII F.v.M. Wuttagoona. September.

SANTALACEÆ.

EXOCARPUS CUPRESSIFORMIS Labill. On granite-hills at Nymagee.

Subclass iv. GYMNOSPERMÆ.

CONIFERÆ.

CALLITRIS VERRUCOSA R.Br. "Turpentine-Pine." On sandy slopes, 40 miles south west of Cobar, and south of Nymagee.

C. GRACILIS (additional note). There is an abundance of this Pine growing on the Meadows runs, about 45 miles west of Cobar. It seems to choose low-lying ridges of crushed sandstone, over a substratum of limestone. It freely intermixes with *C. glauca*.

The local Pines, though by some authorities said to be suitable for sleepers, etc., are quite useless when once the timber is dry, to bear any such strain; it has a habit of breaking up almost like earthenware.

Class ii. **MONOCOTYLEDONS.****AMARYLLIDÆ.**

CALOSTEMMA PURPUREUM R.Br. Wuttagoona. Growing among the rocks at the Falls. The rock-wallaby is very partial to this plant.

LILIACEÆ.

ANGUILLARIA DIOICA R.Br. Wuttagoona. September.

THYSANOTUS PATERSONI R.Br. A few instances of this climbing species at Shuttleton. September.

JUNCACEÆ.

JUNCUS PAUCIFLORUS R.Br. Cobar and Amphitheatre. September.

J. POLYANTHEMUS. Meryula. October.

FIMBRISTYLIS FERRUGINEA Vahl. Wuttagoona. This is favoured as a good fodder-plant.

F. COMMUNIS Kunth. Wuttagoona.

NAIADÆ.

POTAMOGETON CRISPUS Linn.

CYPERACEÆ.

CYPERUS SANGUINEO-FUSCUS Hk. Wuttagoona.

SCIRPUS DEBILIS Pursh. In a garden, at Cobar. September.

CAREX INVERSA R.Br. Towards Louth. September.

GRAMINEÆ.

ERIOCHLOA ANNULATA Kunth.

ANDROPOGON PERTUSUS Willd. Wuttagoona.

PHALARIS MINOR Retz. This grass has become well established over the district, and is sometimes called "Canary Grass."

ARISTIDA ARENARIA Gaud. Wuttagoona.

A. RAMOSA R.Br. Cobar. October.

STIPA (additional note). The most prevalent forms in this district are *S. scabra* Lindl., and *S. semibarbata* R.Br. The seeds of these species are ripe at shearing-time; hence to avoid depreciation in the value of the clip by

reason of grass-seeds, it is necessary to get the shearing over before the shedding of the seeds. These seeds are also troublesome to the eyes of the sheep: the reflexed hairs, towards the point of the achene, give a pushing motion to the awn, while the "corkscrew" arrangement higher up forces the point to bore into the cornea, causing blindness, and then starvation.

- S. SETACEA R.Br. Wuttagoona. September.
 DICHELACHNE SCIUREA Hk. Cobar. October.
 D. CRINITA Hk. Mount Boppy. October.
 DEYEUXIA FORSTERI Kunth. Growing in a watercourse at the Meadows. October.
 AMPHIBROMUS NEESII Steud.
 DANTHONIA SETACEA R.Br. About three miles from Cobar, on the Louth Road. September.
 AMPHIPOGON STRICTUS R.Br. Cobar. May.
 PAPPOPHORUM COMMUNE F.v.M. Cobar. October.
 P. NIGRICANS R.Br. Cobar and Mount Boppy. October.
 TRIODIA IRRITANS R.Br. "Spinifex." This grass gives its name to the south and south-west portions of the district.
 LEPTOCHLOA DECIPENS Hof. A rare grass, collected on the hill-tops of Wuttagoona, by Mr. L. Abrahams.
 ERIACHNE MUCRONATA R.Br. Near Louth. October.
 ERAGROSTIS FALCATA Gaud. Near Louth. October.
 BROMUS UNIOLOIDES Humb. Cobar. October.
 *FESTUCA BROMOIDES Linn. Cobar. September.
 AGROPYRUM SCABRUM Beauv. Scattered over the district. October.

Class iii. ACOTYLEDONS.

Subclass i. ACROGENÆ.

MARSILIACEÆ.

- MARSILEA DRUMMONDII A.Br. Fort Bourke Tank, Cobar.

MUSCI.

- FUNARIA APOPHYSATA Tayl. Mount Boppy.
 P. TASMANICA. Fairly common in shaded spots at Yanda Creek, Meryula.

GIGASPERMUM REPENS Hk. Mount Boppy.

GONIOMITRIUM ENERVE. Meryula.

Subclass ii. THALLOGENÆ.

LICHENES.

PERTUSARIA sp.(?).

THELOSCHISTES CHRYSOSTHALMUS. Two species only were seen, both growing on dead wood, and were conspicuous by their golden colour.

USNEA BARBATA. On trees at Bulgoo.

PARMELIA CONGRUENS. Wuttagoona and elsewhere.

RHIZOCARPON GEOGRAPHICUM. This is a remarkable form, found on outcrops of rock in the roughest of exposed situations. In appearance, it resembles a greenish-yellow mineral stain.

GRAPHIS SCRIPTA (?). Very rare in the west.

FUNGI.

Lycoperdaceæ.

MYCENASTRUM CARIUM. Mount Boppy and Meryula. This specimen was of giant-proportions, being 4 inches in diameter, globular in shape, like a puff-ball, and having purple spores.

TULOSTOMA McALPINANUM. Mount Boppy.

T. MAXIMUM. In a cultivation-paddock at Cobar.

T. ALBICANS. Yanda Creek, Meryula.

SCLERODERMA sp.(?). A hard ball-formation. Meryula.

LYCOPERDON sp.(?). Mount Boppy.

L. PUSILLUM. A small puff-ball. Meryula.

CALVATIA LILACINA. A bluish-coloured puff-ball. Brura Tank.

GEASTER sp.(?). "Earth-Star." An ash-coloured species, on damp shaded flats at Meryula.

BOVISTA SCABRA. Of a dark brown colour. Meryula.

Polyporaceæ.

HEXAGONA sp.(?). Mount Boppy.

H. GUNNI. Mount Boppy.

POLYSTICTUS SANGUINEUS. Red fungus, generally on dead wood.

P. CINNABARINUS. Snuff-coloured; generally found on dead wood. Mount Boppy.

P. VERSICOLOR(?). Cobar.

POLYPORUS sp.(?). Meryula.

Nidulariaceae.

CYATHUS sp.(?). Yellow-coloured "Birds' Nest" fungus. Brura Tank.

Phalloideae.

PHALLUS sp.(?). A gigantic specimen, 6 inches long.

Videphoraceae.

HYMENOCHÆTE sp.(?). Mount Boppy.

CALOSTOMA sp.(?). Mount Boppy.

Podaxaceae.

PODAXON ÆGYPTIACUS. Wuttagoona. Dark brown, and having a fine, dark brown spore-dust.